| | Application No. | Applicant(s) |
|---|---|---|
| **Notice of Allowability** | 09/629,036 | TENEREILLO, PETER |
| | Examiner | Art Unit | |
| | Alina N. Boutah | 2143 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to <u>9/22/06</u>.

2. ☒ The allowed claim(s) is/are 1, 4, 6, 7, 16, 18-20, and 23

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All    b) ☐ Some*    c) ☐ None  of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
    Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

## DETAILED ACTION

### *Response to Amendment*

This action is in response to Applicant's amendment filed February 16, 2006. Claims 1,

3, 4, 6, 7, 9, 16, 18-20, and 23 are pending in the present application.

## EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with

Cindy Kaplan on December 6, 2006.

The application has been amended as follows: 1) Claims 3 and 9 are to be cancelled and

their limitation are to be inserted into their corresponding independent claims 1 and 6; and 2) In

claim 7, "data signal embodied in a carrier wave" is to be deleted from the claim.

The amended claims 1, 6, 7 and 23 should be read as follows:

Claim 1: A method for providing a persistent connection between a client and a real

server, the method comprising:

providing a local director in communication with a plurality of clients and two or more real servers, said plurality of clients configured for communication with said two or more real servers through said local director;

receiving at said local director a request originating from a first client of said plurality of clients for connection to a virtual server implemented on the local director;

identifying a natural class of an IP address of said first client;

determining if the local director has received and sent out connection requests from any client of said plurality of clients, having the same natural class as said first client by searching a table stored on the local director and identifying previous connections created between the local director and said two or more real servers;

if the local director has received and sent out a connection request to one of said real servers from said first client or any client having the same natural class as said first client, selecting the same real server for connection with said first client,

wherein selecting a real server comprises selecting the same real server for all clients having the same natural class subnet;

if the local director has not received and sent out a connection request to one of said real servers from any client having the same natural class as said first client, selecting one of said real servers based on load balancing; and forwarding to the selected real server transmissions originating from said first client, <u>wherein receiving a request comprises receiving a request from a firewall and wherein the IP address of a device sending the request is the IP address of the firewall.</u>

Claim 6: A computer program product for providing a persistent connection between a client and a server, the client configured for communication with two or more real servers through a local director, the product comprising:

code that receives a request at said local director originating from a first client for connection to a virtual server implemented on the local director;

code that identifies a natural class of an IP address of said first client;

code that determines if the local director has received and sent out connection requests from any client of said plurality of clients, having the same natural class as said first client by searching a table stored on the local director and identifying previous connections created between the local director and said two or more real server;

if the local director has received and sent out a connection request to one of said real servers from any client having the same natural class as said first client, code that selects the same real server for connection with said first client, wherein the code that selects a real server comprises code that selects the same real server for all clients having the same natural class subnet;

code that selects one of said real servers based on load balancing if the local director has not received and sent out a connection request to one of said real servers from any client having the same natural class as said first client; and

code that forwards to the selected real server transmission originating from said first client, wherein the code that receives a request comprises code that receives a request from a firewall and wherein the IP address of a device sending the request is the IP address of the firewall; and

a computer-readable storage medium for storing the codes.

Claim 7: the computer program product of claim 6 wherein the computer-readable medium is selected from a group consisting of CD-ROM, floppy disk, tape, flash memory, system memory, and hard drive.

Claim 23: A system for providing a persistent connection between a client and a real server, the client configured for communication with two or more real servers through a local director, the method comprising:

means for receiving at said local director a request originating from a first client for connection to a virtual server implemented on the local director, the local director in communication with two or more real servers,

means for identifying a natural class of an IP address of said first client;

means for determining if the local director has received and sent out connection requests from any client of said plurality of clients, having the same natural class as said first client by searching a table stored on the local director and identifying previous connections created between the local director and said two or more real servers;

if the local director has received and sent out a connection request to one of said real servers from said any client having the same natural class as said first client, selecting the same real server for connection with said first client;

if the local director has not received and sent out a connection request to one of said real servers from any client having the same natural class as said first client, selecting one of said real

servers based on load balancing, wherein selecting a real server comprises selecting the same

real server for all clients having the same natural class subnet; means for forwarding to the

selected real server transmissions originating from said first client, <u>wherein receiving a request</u>

<u>comprises receiving a request from a firewall and wherein the IP address of a device sending the</u>

<u>request is the IP address of the firewall.</u>

The following is an examiner's statement of reasons for allowance: In view of the

telephone interview conducted on December 6, 2006 between the Examiner and Applicant's

representative, Applicant agreed to cancel dependent claims 3 and 9 and place them in their

respective independent claims.  This puts the claims in better form of allowance because in

combination with every other limitations in the independent claims, the prior art of record does

not teach or suggest method, program, and system for providing persistent connection wherein

receiving a request comprises receiving a request from a firewall and wherein the IP address of a

device sending the request is the IP address of the firewall as claimed.

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee.  Such submissions should be clearly labeled "Comments on Statement of Reasons for
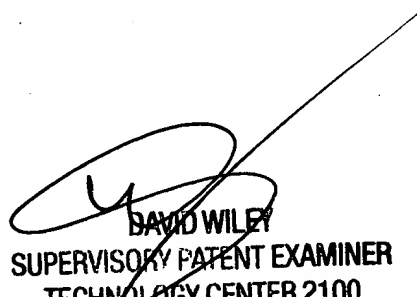
Allowance."

## *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alina N. Boutah whose telephone number is 571-272-3908. The examiner can normally be reached on Monday-Friday (9:00 am - 5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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